Abstract of Disclosure

[0048] A bandwidth allocation method and system designed to provide efficient bandwidth utilization based on data priority and needs of network nodes. This invention provides a specific design for dynamically creating, deleting, resizing, and reclaiming network channels based on priority and the needs of existing connections within a network or within multiple networks. Additionally, this invention provides a process to make channels and their encryption keys persistent through the creation of virtual channels which are made active when data needs to be transferred.